



## "Innovative Sciences and Technologies for the Sustainability of Future Global Economics"

### Introduction



**18-20**  
**December 2018**

Today the emerging economies have the increasing needs to enhance the supply of quality education and of indigenous research to their development goals. With the objectives to promote research within the academic community, to enhance the quality of education, and to engage in industry relationships in advancing economies, UiTM Sarawak Branch will bring together scholars, professionals and practitioners from various disciplines and countries and provide them with a unique platform for sharing the latest theories and prevalent practices in dynamic service economies. In addition, this conference aims to provide researchers, especially the young researchers to niche their academic studies with the ever-changing technological environment for better improvement in their respective specialized areas and it is especially useful even after they have graduated.

### Conference Objectives

The theme for InnoSTRE 2018 is "Innovative Sciences and Technologies for the Sustainability of Future Global Economics". This maiden conference will be a platform for local and international participants from both academic and industries to present their authoritative knowledge and up-to-date research findings in innovative sciences and technologies. It aims to provide new opportunities to others who are preparing to venture into innovative sciences and technologies for the exchange of information and knowledge for service excellence. The conference will provide an opportunity to highlight the most recent innovation in science and technology developments, identify emerging and future areas of growth and collaborate in these exciting fields.

### Sub-themes

Authors are invited to submit full papers describing original research. Areas of interest include, but are not limited to Innovative Sciences and Technologies in:

Chemistry	Industrial Chemistry	Agriculture	Medical and Health Sciences
Biology	Green Chemistry	Halal Management	Computer Science
Physics	Education	Tourism and Hospitality	Big Data Analysis
Mathematics and Statistics	Food and Beverage	Sports Science	Expert System
			Engineering Technology

### Conference Fees

	International Participant (USD)	Local Participant (RM)
Early Registration for Students	250	600
Early Registration for Participants/Presenters	300	800
Regular Registration for Students	300	700
Regular Registration for Participants/Presenters	350	900
Pre - Conference Workshop	100	200
Post- Conference Tour	100	200

Please submit your Abstract and Full Paper to [innostre.uitmsarawak@gmail.com](mailto:innostre.uitmsarawak@gmail.com)

All accepted full papers will be considered for possible publication in an indexed Journal or proceeding.

Further information can be obtained from <http://www.sarawak.uitm.edu.my/sst/>

### Abstract submission deadline: 15 September 2018

Notification of Abstract Acceptance	: 30 September 2018
Full Paper Submission Deadline	: 15 October 2018
Notification of Full Paper Acceptance	: 15 November 2018
Submission of Final Revised Paper	: 30 November 2018
Registration of Authors (Early Bird)*	: Before 31 August 2018
Registration of Authors (Regular) **	: Before 15 November 2018

**InnoSTRE Conference Secretariat 2018**  
**Faculty of Applied Sciences**  
**Universiti Teknologi MARA Sarawak Branch**  
**Samarahan 2 Campus**  
**Jalan Meranek**  
**94300 Kota Samarahan**  
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## Programme Schedule

### TUESDAY (DEC 18, 2018)

TIME	ACTIVITY	VENUE
1500 - 1700	Early Registration of Conference Participants	Level 3

### WEDNESDAY (DEC 19, 2018)

TIME	ACTIVITY	VENUE
0730 - 0800	Registration	Level 3
0800 - 0830	Morning Tea	Level 3
0830 - 0900	<b>Chairperson: Professor Dr. Siva K Balasundram</b> <b>Plenary Lecture</b> by Professor Dr. V. Sivaram Beekeeping - Its Importance in Agriculture, Biodiversity Conservation and Sustainable Livelihoods	BALLROOM, Level 3

### OPENING CEREMONY

Venue: **BALLROOM, LEVEL 3**

**0900 – 1030**

1100 - 1200	<b>Chairperson: Professor Dr. V. Sivaram</b> <b>Keynote Lecture</b> by Professor Dr. Siva K Balasundram Precision Agriculture Research Priorities and Opportunities: A Malaysian Perspective	BALLROOM, Level 3
1200 - 1230	<b>Invited Lecture 1</b> by Dr. Bai Shi Yin The Innovative Technology of Positive Energy Agriculture	BALLROOM, Level 3
1230 - 1300	<b>Invited Lecture 2</b> by Mr Patrick Lim Increased Palm Oil Yield Through Greener Technology of Rapid Screening FT NIR and Validated Method Atomic Spectroscopy Techniques	BALLROOM, Level 3
1300 - 1400	Lunch	
1400 - 1600	<b>SESSION 1:</b> Parallel Oral Presentation [1A, 1B, 1C and 1D]	DLS /SC3 /WoK1-2 /WoK3-4
1600 - 1630	Tea Break	
1630 - 1830	<b>SESSION 2:</b> Parallel Oral Presentation [2A, 2B, 2C and 2D]	DLS /SC3 /WoK1-2 /WoK3-4
1930 - 2200	Welcoming Dinner	BALLROOM, LEVEL 3

### THURSDAY (DEC 20, 2018)

TIME	ACTIVITY	VENUE
0830 - 1030	<b>SESSION 3:</b> Parallel Oral Presentation [3A, 3B, 3C and 3D]	DLS /SC3 /WoK1-2 /WoK3-4
1030 - 1100	Tea Break	
1100 - 1300	<b>SESSION 4:</b> Parallel Oral Presentation [4A, 4B, 4C and 4D]	DLS /SC3 /WoK1-2 /WoK3-4
1300 - 1400	Lunch	
1400 - 1600	<b>SESSION 5:</b> Parallel Oral Presentation [5A, 5B, 5C and 5D]	DLS /SC3 /WoK1-2 /WoK3-4
1600 - 1630	Tea Break	
1630 - 1830	<b>SESSION 6:</b> Parallel Oral Presentation [6A, 6B, 6C and 6D]	DLS /SC3 /WoK1-2 /WoK3-4

Note: DLS - Deer and Lady Suite (Level 3);

SC3 - Sarawak Chamber 3 (Level 3)

WoK1-2 - Windows on Kuching 1 and 2 (Level 18)

WoK3-4 - Windows on Kuching 3 and 4 (Level 18)



## Opening Ceremony

### ***1<sup>st</sup> International Conference on Innovative Sciences and Technologies for Research and Education (InnoSTRE)2018***

***"Innovative Sciences and Technologies for the Sustainability of Future Global Economics"***

**19 DECEMBER 2018 (WEDNESDAY)**

**Ballroom, Level 3, Riverside Majestic Hotel, Kuching**

<b>TIME</b>	<b>PROGRAMME</b>
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<b>0900</b>	Arrival of Invited Guests
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<b>0930</b>	Arrival of The Right Honourable Datuk Patinggi (Dr) Abang Haji Abdul Rahman Zohari Bin Tun Datuk Abang Haji Openg <i>Chief Minister of Sarawak</i>
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*Doa Recitation*

Welcoming Speech by Professor Dato Dr Jamil Haji Hamali  
*Rector, Universiti Teknologi MARA Cawangan Sarawak*  
*Advisor, International Organising Committee of InnoSTRE2018*

Opening Speech by The Right Honourable  
Datuk Patinggi (Dr) Abang Haji Abdul Rahman Zohari  
Bin Tun Datuk Abang Haji Openg  
*Chief Minister of Sarawak*

Photo Session

Refreshment

END



## Presentation Schedule

### DAY 1 WEDNESDAY (DEC 19, 2018)

<b>SESSION 1A</b>		<b>Chairperson: Dr. Isabel Fong Lim</b> <b>Venue: Deer and Lady Suite (Level 3)</b>
1	1400 - 1420	<b>[AB019] Development of Human Blastocystis ST3 and ST1 Multiplex Detection Primers from Unique SSU rRNA Gene</b> Mohamad Izwan Bin Ismail, Tengku Shahrul Anuar Bin Tengku Ahmad Basri and Nurul 'Izzati Binti Zulkifli
2	1420 - 1440	<b>[AB024] Virtual Screening of Selected Sea Cucumber Compounds as Inhibitor Human Kinesin-8</b> Broto Santoso
3	1440 - 1500	<b>[AB075] Bioassay-guided Fractionation and Screening of Active Substances from <i>Micromonospora</i> sp. against Gram Negative Bacteria</b> Ajuwin Lain, Sabda Safice and Ann Basik
4	1500 - 1520	<b>[AB080] Draft Genome Analysis of <i>Actinomyces</i> sp. <i>corticicola</i> PP80, a Novel Species Isolated from Pepper Plantation</b> Mohd Farith Kota, Holed Juboi and Tiong Chia Yeo
5	1520 - 1540	<b>[AB037] High Glycemic Index Diet Decrease Insulin Secretion Without Altering Akt and Pdx1 Expression on Pancreatic Beta Cells Mice</b> Lilik Herawati, Gadis Meinar Sari and Roedi Irawan
6	1540 - 1600	<b>[AB022] Antidiabetes Activity of Leaves-Stem of Purple Sweet Potatoes (<i>Ipomoea Batatas</i> L.) Extracts on Diabetic Wistar Rats Induced by Alloxan</b> H. Haryoto and Ermia Septianadevi
<b>SESSION 1B</b>		<b>Chairperson: Dr. Ahmad Lutfi Anis</b> <b>Venue: Sarawak Chamber 3 (Level 3)</b>
7	1400 - 1420	<b>[AB074] Preliminary Comparison of Human Body Electromagnetic Radiation and Stress Level Between Smokers and Non-Smokers</b> Ros Shilawani Bt S. Abdul Kadir, Zunairah Haji Murat and Che Ku Hilmi Che Ku Salim
8	1420 - 1440	<b>[AB030] Hand-held Tele-ultrasound – the Hype of the Heart</b> Manohari Balasingam and B Sivalingam
9	1440 - 1500	<b>[AB047] Affective Neurophysiological Algorithmic Model for Learning Analytics Profiling</b> Norhaslinda Kamaruddin and Abdul Wahab Abdul Rahman
10	1500 - 1520	<b>[AB068] Profiling Students for Effective Learning based on Neuro-Physiological Interface of Affect</b> Abdul Wahab Abdul Rahman and Norhaslinda Kamaruddin
11	1520 - 1540	<b>[AB006] Multi-Relational Latent Phono-Semantic Analysis Model For Extracting Qura'nic Concept</b> Asma Abdul Rahman
12	1540 - 1600	<b>[AB004] Assessing the Awareness and Perception of Hoteliers Towards Shariah Compliant Hotel Operations</b> Noor Azimin Zainol, Rozila Ahmad and Muhamad Shah Kamal Ideris



**DAY 1 WEDNESDAY (DEC 19, 2018)**

<b>SESSION 1C (AS)</b>		<b>Chairperson: Dr. Mohammad Isa Mohamadin</b> <b>Venue: Windows on Kuching 1 and 2 (Level 18)</b>
13	1400 - 1420	<b>[AS001] Determination of Heavy Metals Content and Analysis of Porcine DNA in <i>Ipomea aquatica</i> in Swine Farm Wastewater and Other Sources</b> Emilia Anak Juan and Norhasnan Sahari
14	1420 - 1440	<b>[AA001] Determination of Heavy Metals Content and the Analysis of Porcine Contamination in Different Brands of Corned Beef</b> Juane Bella Langgi and Norhasnan Sahari
15	1440 - 1500	<b>[AS003] Analysis of Fourier Transform Infrared Spectroscopy (FTIR) and Real Time Polymerase Chain Reaction (qPCR) for The Presence of Porcine in Processed Foods</b> Nurul Farhatin Bt. Roslan, Nurhafizah Bt. Mohd Selihin and Shahrina Bt. Shah Jahan
16	1500 - 1520	<b>[AS004] Determination of Heavy Metals (Lead, Cadmium, Copper, Zinc and Iron) in Different Species of Prawns at Local Market in Kuching</b> Azreen Nisha Binti Idrishah and Norhasnan Sahari
17	1520 - 1540	<b>[AS005] Analysis of Trace Elements in Talc Powder Available in Malaysia</b> Fatin Izzati Jaidil and Wong Mui Hung
18	1540 - 1600	<b>[AS006] Determination of Heavy Metals (Fe, Ni, Pb) in Lipsticks using Atomic Absorption Spectroscopy</b> Fedrick Ding Anak Sakai and Siti Kartina Abdul Karim

<b>SESSION 1D (AS)</b>		<b>Chairperson: Mdm Rabayah Binti Ni</b> <b>Venue: Windows on Kuching 3 and 4 (Level 18)</b>
19	1400 - 1420	<b>[AS013] Synthesis and Characterization of Tartaric Acid Modified Starch (Sago Starch)</b> Wan Nur Liyana Bt Amri and Wong Mui Hung
20	1420 - 1440	<b>[AS014] Isolation and Antipest Activity of Barks of <i>Swietenia macrophylla</i></b> Afihaziqah Sujiyo and Wong Mui Hung
21	1440 - 1500	<b>[AS015] Synthesis of Dynamic Alginate Hydrogels</b> Husna Zolkepli and Cindy Soo Yun Tan
22	1500 - 1520	<b>[AS016] Synthesis and Antibacterial Activity of 2-Phenyl-4H-Chromen-4-One (Flavone)</b> Charles Rolend, Nyotia anak Nyokat, Khong Heng Yen and Korrawinwich Boonpisuttinant
23	1520 - 1540	<b>[AS017] Synthesis and Antibacterial Activity of 2-(4-bromophenyl)chroman-4-one</b> Nur Faziela binti Opandi and Nyotia Nyokat
24	1540 - 1600	<b>[AS018] Flavonoids Derivatives and Its Antibacterial Activity</b> Nurul Syafiqah binti Mohamad Sadri and Nyotia anak Nyokat



**DAY 1 WEDNESDAY (DEC 19, 2018)****SESSION 2A****Chairperson: Associate Professor Dr. Haryoto****Venue: Deer and Lady Suite (Level 3)**

- 25 1630 - 1650 **[AB073] Sustainability and Good Agricultural Practices on Soil Properties and Yield of Oil Palm (*Eleais guinensis*)**  
Seraphina Anak Dominic Gisong and Margaret Chan Kit Yok
- 26 1650 - 1710 **[AB051] Insect Relative Abundance in Different Management of Cocoa Planting Area**  
Saripah Bakar
- 27 1710 - 1730 **[AB057] Heavy Metals Contamination in Tilapia Fish (*Oreochromis mossambicus*) from Three Different Farms in Sarawak, Malaysia**  
Nur Afiqah Mohamad, Mohammad Isa Mohamadin, Wan Abdul Rahim Wan Ahmad and Norhasnan Sahari

**SESSION 2B****Chairperson: Associate Professor Dr. Asma Abdul Rahman****Venue: Sarawak Chamber 3 (Level 3)**

- 28 1630 - 1650 **[AB042] Efficiency of Using a Physiological Portrait of a University Student in Physical Education**  
Valentina Talantseva, Nadezhda Altynova and Nadezhda Pianzina  
(recorded presentation)
- 29 1650 - 1710 **[AB036] Barriers in Religious School Administration and Management: A Preliminary Study**  
Huraizah binti Arshad, Izran Sarrazin bin Mohammed and Noraini binti Johari
- 30 1710 - 1730 **[AB033] Effective English Communication Skills of Students in BBA (Hons) at International Islamic University Islamabad**  
Muhammad Hussain Khan and Muhammad Adnan Khan

**SESSION 2C (AS)****Chairperson: Mr. Norhasnan Bin Sahari****Venue: Windows on Kuching 1 and 2 (Level 18)**

- 31 1630 - 1650 **[AS007] Halal Analysis of Selected Brands of Nuggets Using FTIR and RT PCR**  
Muhammad Haidhar Anas Bin Jamil, Bebe Norlita Binti Mohamed and Shahrina Binti Shah Jahan
- 32 1650 - 1710 **[AS008] PCR and FTIR Analysis of Noodles for Halal Analysis**  
Nurul Afiqah binti Sharif and Mohamad Isa bin Mohamadin
- 33 1710 - 1730 **[AA002] Determination of Heavy Metals in Baby Milk Powder and Baby Foods**  
Nur Sharmine Irda Bt Ahmad and Mohammad Isa Bin Mohamadin
- 34 1730 - 1750 **[AA003] Analysis of Heavy Metals and Minerals Content of *Etilingera coccinea***  
Mohd. Khairul Nizam Bin Moh Rafie and Wong Mui Hung
- 35 1750 - 1810 **[AS011] Determination of Heavy Metals Accumulation in Selected Plant Leaf use as Food Wrapper**  
Nur Dewi Amira bt Abdul Malik and Nurhafizah bt Mohd Selihin
- 36 1810 - 1830 **[AS012] Analysis of Heavy Metals in Cosmetic Soaps Sold in Local Market in Kuching and Online Shopping Platform in Malaysia**  
Zuraidey Puteri Ja'afar and Nurhafizah Mohd Selihin



**DAY 1 WEDNESDAY (DEC 19, 2018)**
**SESSION 2D (AS)**
**Chairperson: Mdm. Rabayah Binti Ni**
**Venue: Windows on Kuching 3 and 4 (Level 18)**

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|----|-------------|---|
| 37 | 1630 - 1650 | <b>[AS019] Synthesis and Characterisation of Supramolecular Polymer Hydrogels Based on Ionic Crosslinking</b><br>Farah Izyan binti Abdul Aziz and Cindy Soo Yun Tan           |
| 38 | 1650 - 1710 | <b>[AA004] Heavy Metal Removal (Cr (VI)) from Wastewater by using Carrot Residues as Biosorbent</b><br>Mohd. Izuddin Bin Nuzul and Siti Kartina Abdul Karim                   |
| 39 | 1710 - 1730 | <b>[AA005] Determination of Heavy Metals (Cu, Fe, Ni, Pb and Zn) In Piper Betel Plant</b><br>Agnes David and Bebe Norlita Mohamed   |
| 40 | 1730 - 1750 | <b>[AS022] Determination of Heavy Metal in Soil Sample in Samarahan by using Atomic Absorption Spectrometer</b><br>Mohd Sharulnizam bin Salimin and Siti Kartina Abdul Karim  |
| 41 | 1750 - 1810 | <b>[AS023] Synthesis and Characterized of Cobalt(II) Complex with Schiff Base Ligand and Its Biological Activities</b><br>Cynthia Setangkai Rabong Brita and Yanti Yana Halid |
| 42 | 1810 - 1830 | <b>[AS024] Synthesis and Characterization of Nickel(II) Complex with Schiff Base Ligand and Its Biological Activity</b><br>Irena Lenny Bined and Yanti Yana Halid             |

**DAY 2 THURSDAY (DEC 20, 2018)**
**SESSION 3A**
**Chairperson: Dr. Robin Chang Yee Hui**
**Venue: Deer and Lady Suite (Level 3)**

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|----|-------------|--|
| 43 | 0830 - 0850 | <b>[AB005] A Promising Lightweight Hybrid Nanocomposite as Microwave Absorber at Higher GHz Frequency Range</b><br>Fadzidah Mohd Idris, Khamirul Amin Matori, Ismayadi Ismail, Zaiki Awang, Idza Riati Ibrahim, Siti Nor Ain Rusly and Mohd Shamsul Ezzad Shafie |
| 44 | 0850 - 0910 | <b>[AB043] SPH Modeling of Directed Self-assembly Approach for ZnS Photonic Crystal</b><br>Chong Chee Jiun and Noor Azie Azura binti Mohd Arif   |
| 45 | 0910 - 0930 | <b>[AB032] Mechanism of CO<sub>2</sub> Capture by Chemisorption in Ionic Liquid Impregnated Silica</b><br>Tengku Sharifah Marliza Tengku Azmi, M.A. Yarmo, A. Hakim, Y.H. Taufiq-Yap   |
| 46 | 0930 - 0950 | <b>[AB054] Development of Partial Least Squares Integrated Fourier Transform Infrared Approach for Determination of Moisture Content in Lubricating Oil</b><br>Amelia Lacey Anak Jeffrey Kimura and Siong Fong Sim   |
| 47 | 0950 - 1010 | <b>[AB055] Past and Current Development of Two-Phase Modeling of Polypropylene in Gas Phase Fluidized Bed Reactor: A Review</b><br>Mohd Farid Atan, Mohd Azlan Hussain and Nazeri Abdul Rahman   |
| 48 | 1010 - 1030 | <b>[AB017] Team Software Process (TSPi) Web-Based Support Tool</b><br>Nurfauza Jali, Azman Bujang Masli, Cheah Wai Shiang, Yanti Rosmunic Bujang, Abdul Rahman Mat, Suriati Khartini Jali and Norazian Mohd Hamdan   |



<b>DAY 2 THURSDAY (DEC 20, 2018)</b>		
<b>SESSION 3B</b> <b>Chairperson: Associate Professor Dr. Khong Heng Yen</b> <b>Venue: Sarawak Chamber 3 (Level 3)</b>		
49	0830 - 0850	<b>[AB011] Antibacterial Activity and Bioautography Polar Fraction of Ethanolic Extracts of Leaves of Soursop (<i>Annona muricata</i> L.) against <i>Klebsiella pneumoniae</i> and <i>Staphylococcus epidermidis</i></b> H. Haryoto, Peni Indrayudha and Kosworo
50	0850 - 0910	<b>[AB023] Isolation and Antioxidant Activity of Extract Ethanol Leaf <i>Rhizophora Mucronata</i> And <i>Rhizophora Apiculata</i></b> Novan Visia Farmasari and H. Haryoto
51	0910 - 0930	<b>[AB062] Integrated Accomplice Profiling Process for Social Network Investigation</b> Taniza Tajuddin and Azizah Abdul Manaf
52	0930 - 0950	<b>[AB082] The Linear Penalized-Spline Mixed-Model under Informative Sampling to Estimate Small Area Means</b> Angela Nina. R. Chytrasari, Sri Haryatmi Kartiko and Danardono
53	0950 - 1010	<b>[AB041] Fatty Acid Profiles in the Kernel Oils of <i>Artocarpus Odoratissimus</i> and <i>Litsea Garciae</i></b> Firus Musfirah Poli and Zaini Bin Assim
54	1010 - 1030	<b>[AB008] High-Intensity Interval Training and High-Intensity Resistance Training on Body Fat Percentage and Aerobic Fitness among Female Overweight Adults</b> Asfarina Jitwil, Patricia Pawa Pitil and Wan Juliana Emeih Wahed
<b>SESSION 3C (AS)</b> <b>Chairperson: Dr. Cindy Tan Soo Yun</b> <b>Venue: Windows on Kuching 1 and 2 (Level 18)</b>		
55	0830 - 0850	<b>[AS025] Determination of Heavy Metals in Fertilizers of Bau Singai Sarawak</b> Bellona Joseph and Sharifah Nadzirah Binti Wan Hamid
56	0850 - 0910	<b>[AS026] Water Quality Assessment of Rivers At Kampung Atas, Kampung Daun And Kampung Bobak, Bau, Sarawak</b> Mathressa Mathews and Sharifah Nadzirah binti Wan Hamid
57	0910 - 0930	<b>[AS027] Analysis of Heavy Metals Content in Sarawak Black Pepper from Singai Area, Bau</b> Shirley Shireano anak Karl and Sharifah Nadzirah binti Wan Hamid
58	0930 - 0950	<b>[AS028] Determination of Heavy Metals in Ikan Bulu (<i>Polydactylus Luparensis</i>)</b> Nurul Shahmila Bt Abdullah and Norhasnan Sahari
59	0950 - 1010	<b>[AS029] Heavy Metals Determination in Traditional Medicine Sold in the Local Market of Sarawak and Online Shopping Platform in Malaysia</b> Dyg Hazira Izzati Abg Jamil and Nurhafizah Binti Mohd Selihin
60	1010 - 1030	<b>[AS030] Synthesis and Characterized of Copper(II) complex with Schiff Base Ligand and Its Anti-microbial Activity</b> Doraelly Sabin and Yanti Yana Halid

## DAY 2 THURSDAY (DEC 20, 2018)

### SESSION 3D (EN)

**Chairperson: Dr Hazman Seli**

**Venue: Windows on Kuching 3 and 4 (Level 18)**

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|----|-------------|---|
| 61 | 0830 - 0850 | <b>[EN001] Adsorptive Performance of GSC and Coconut Shell Based Activated Carbon</b><br>Irna Bakri and Rosnah Abdullah   |
| 62 | 0850 - 0910 | <b>[EN002] Preliminary Evaluation of Corrosion Resistance of Coated Magnesium Alloy (Mg-4Zn-0.3Ca)</b><br>Faedzatul Farhana Ahmadul Mustaph, <b>Jessy Sawai Stephen</b> and Hazman Seli |
| 63 | 0910 - 0930 | <b>[EN003] A Review on Technologies Used for Color Removal from Textile Wastewaters</b><br><b>Daphne Lemoi Anak Tawan</b> , Viviana Ellicem Anak Harry and Geraldine Chan Sue Ching     |
| 64 | 0930 - 0950 | <b>[AA008] Water Quality of Lake in Desa Ilmu, Samarahan</b><br>Nur Rafaaney Sevester, Victor anak Vincent, Juplin Kinti and Beatrice Christianus Bidaun                                |
| 65 | 0950 - 1010 | <b>[EN005] Study on Coagulation Activity of Pineapple Peel in Water Treatment</b><br>Nor Ashya Amira, Noradilla Izzawanny Abdul Hasan and Dayang Aisah Abang Chi                        |
| 66 | 1010 - 1030 | <b>[EN006] Global Warming Mitigation Effort in Malaysian Transportation Sector</b><br>Nur Jasma Izzerin Jamaludin, Mohamad Azrul Hakasah, Sumathi Sethupathi and Lee Chung Lau          |

### SESSION 4A

**Chairperson: : Mr. Joe Davylyn Nyuin**

**Venue: Deer and Lady Suite (Level 3)**

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|----|-------------|--|
| 67 | 1100 - 1120 | <b>[AB049] Contrast Enhancement Pipelines for Digital Image Captured in Dark Environment</b><br>Seng Cheng Yeoh, <b>Haidi Ibrahim</b> and Theam Foo Ng   |
| 68 | 1120 - 1140 | <b>[AB027] Green Wall and Green Roof as Mitigation Strategies to Combat Urban Heat Island (UHI) Phenomenon</b><br>Siti Halipah Ibrahim, <b>Nurul Izzati Ahmat @ Ibrahim</b> , Julaihi Wahid, Afzan Ahmad Zaini and Mohd Nasrun Mohd Nawi |
| 69 | 1140 - 1200 | <b>[AB076] An Assessment of Building Performance on Post Occupancy in Higher Education Buildings in Sarawak</b><br>Siti Nurul Ainun bt Mohd Mustafa, Awang Ihsan bin Awang Yunus and Balkhiz bt Ismail                                   |
| 70 | 1200 - 1220 | <b>[AB078] Mechanical Properties of Kapok Fiber Reinforced Polyvinyl Alcohol Biocomposite</b><br><b>Muhamad Danial Jamat</b> and Jahimin Asik  |
| 71 | 1220 - 1240 | <b>[AB081] Energy Extraction from Low Height Sea Wave by Point Absorber Type Converter</b><br><b>Lee Man Djun</b>  |
| 72 | 1240 - 1300 | <b>[AB071] Array Antenna Design For Shallow Freshwater Applications</b><br>Dzufi Iszura Ispawi, Hadi Jumaat and Mazlina Mansor Hassan  |



**DAY 2 THURSDAY (DEC 20, 2018)****SESSION 4B****Chairperson: Associate Professor Dr. Ling Siew Eng****Venue: Sarawak Chamber 3 (Level 3)**

- 73    1100 - 1120    **[AB009] Undergraduates' Speaking Anxiety in ESL classrooms**  
Kimberley Lau Yih Long, Yeo Jiin Yih and Sandra Sim Phek Lin
- 74    1120 - 1140    **[AB079] Errors and Misconceptions in Algebra: A Case Study of Pre-Commerce Students at UiTM Sarawak**  
Ting Su Ung, Ling Siew Eng and Chen Chee Khium
- 75    1140 - 1200    **[AB060] Usage of affordable Arduino robot to promote STEM education among young children**  
BengYong Lee, LeeHung Liew, Mohd Yazid Bin Mohd Anas Khan and Azlina Narawi
- 76    1200 - 1220    **[AB045] Intrinsic Motivation of Students in STEM through the Minimalist Robotics Program**  
Nur Lisa Zaharin, Sabariah Sharif, Rosy binti Talin, Soon Singh A/L Bikar Singh, Pathmanathan A/L Suppiah, Muralindran Mariappan and Navin Mohanaraj
- 77    1220 - 1240    **[AB046] Examining the Determinants of Smartphone-based Mobile Learning: An Integrated Approach**  
Anderson Ngelambong, Hashim Fadzil Ariflin, Nur'Hidayah Che Ahmat, Wan Hayati Wan Bujang, Mohd Faisal Abdul Wahab and Ahmad Hidayat Ahmad Ridzuan
- 78    1240 - 1300    **[AB048] A Methodology for Promoting STEM Education in Lower Secondary Education through Minimalist Robotics**  
Navinn Mohanaraj, Muralindran Mariappan, Sabariah Sharif, Nur Lisa Zaharin, Rosy binti Talin, Soon Singh A/L Bikar Singh, Pathmanathan A/L Suppiah and Yusmail Jusup

**SESSION 4C (AS)****Chairperson: Dr. Vivien Jong Yi Mian****Venue: Windows on Kuching 1 and 2 (Level 18)**

- 79    1100 - 1120    **[AS031] Nutrition Profile, Chemical Analysis and Biological Activities of *Areca Catechu* L. Fruits (Areca Nut) from Borneo**  
Amelina Anak James Otembrou, Khong Heng Yen and Nyotia Nyokat
- 80    1120 - 1140    **[AS032] Chemical Profile, Biological Analysis and Nutrition Analysis of *Metroxylon Sagu* for Product Development**  
Jasmin Farhana Hanafi, Khong Heng Yen and Korawinwich Boonpisuttinant
- 81    1140 - 1200    **[AS033] Chemical Analysis and Biological Activities of *Annona muricata* Leaves Extract in Sarawak**  
Mujibuddin bin Morshidi, Khong Heng Yen and Korawinwich Boonpisuttinant
- 82    1200 - 1220    **[AS034] Phytochemical Study, Antioxidant, Antimicrobial and Anti-Cancer Activities of *Erythralum scandens* (Palibas)**  
Nur Waffa Syazwani Mazlan, Khong Heng Yen and Korawinwich Boonpisuttinant
- 83    1220 - 1240    **[AS035] Characterizations and Bioactivities of *Litsea garciae***  
Nurul Shamizatul Majit, Syaliza Abdul Hammid and Junaidah Mat Jusoh
- 84    1240 - 1300    **[AS036] Fractionation and Bioactivities of *Pometia pinnata***  
Sonia Unyang Jau, Syaliza Abdul Hammid and Mohd Razip Bin Asaruddin

**DAY 2 THURSDAY (DEC 20, 2018)**

**SESSION 4D (EN)**      **Chairperson: Mdm Bibi Sarpinah Sh Naimullah**  
**Venue: Windows on Kuching 3 and 4 (Level 18)**

- 85      1100 - 1120      **[EN007] Smart Medication System: Dispenser and Reminder**  
 Abg. Hazwan Abg. Mentaril, **Aizad Thabrani Abu Bakar**, Hadi Jumaat, Muhd Firdaus Muhd Yusoff and Nurfarahiah Ibrahim
- 86      1120 - 1140      **[EN008] Design of Smart Dustbin for Smart Campus**  
 Dayang Nurul Fatin Awang Ideris, **Muhammad Nur Ikmal Abdul Laatib**, Mohd Yazid Mohd Anas Khan, Fatimatul Anis Bakri, Dzufi Iszura Ispawi, Ahmad Nurrizal Muhamad
- 87      1140 - 1200      **[EN009] Automatic Bluetooth Curtain**  
 Dennessa Daylan, **Edgar Irwin Michael Pawing**, Nur Atiqah Abdul Rahman, Ishak Annuar and Mohd Yazid Mohd Anas Khan
- 88      1200 - 1220      **[AA009] Design of Smart Cashier Prototype based on Microcontroller ATmega328p**  
**Muhd Ikmal Rafiq Suria**, Nazzlilywanni Roslan, Bibi Sarpinah Sh Naimullah, Mazlina Mansor Hassan and Saurdi Ishak
- 89      1220 - 1240      **[EN011] Performance of *Carica papaya*, *Cucurbita moschata* and *Momordica charantia* Seeds as Natural Coagulants for the Purification of River Water**  
**Muhammad Muqtadir Iqbal Kamaludin**, Atiq Gafari Mohd Hajal, Hairul Marwan Hadi Adam, Caroline Marajan and Maureen Negin
- 90      1240 - 1300      **[EN012] Laboratory Investigation to the Model Pullout Behaviour of Anchor Block in Sandy Soil**  
**Abang Nazirul Izzat Abang Yusuf**, Muhammad Faizal Azman Sulaihi, Kenneth Saa Iba, Joe Davylyn Nyuin, Embam Da'ud and Adnan Derahman

**SESSION 5A**              **Chairperson: Dr. Peni Indrayudha**  
**Venue: Deer and Lady Suite (Level 3)**

- 91      1400 - 1420      **[AB018] Performance Assessment of Steel Fibre Reinforced Self-compacting Concrete (SCFRC) Panel with Ribbed Profile**  
**Hazrina Ahmad**, Mohd Hisbany M.H. and Ezatul Yasmin B.
- 92      1420 - 1440      **[AB007] Physico-Chemical Properties and Acceptability of Purple Sweet Potato Jams with Various Levels of Pectin**  
**Rusdin Rauf** and Reni Gustia
- 93      1440 - 1500      **[AB012] The Effectiveness of Biochar in Composting of Food Waste**  
**Juplin Kinti**, Lydia Dundun Francis, Sunita Jobli, Mohd Dzulkarnain B Abdul Aziz and Melter Tristan Michael
- 94      1500 - 1520      **[AB025] Characterization of Bone Waste using Inductively Coupled Plasma-Atomic Emission Spectroscopy, Flame Atomic Absorbance Spectroscopy, Fourier Transform Infra-red Spectroscopy and Chemometric Analysis**  
**Nur Aidelia Rosli** and Mohammad Isa bin Mohamadin
- 95      1520 - 1540      **[AB050] Pupation preference of *Conopomorpha cramerella* (Snellen) after treating with *Zingiber officinale*, *Curcuma longa* and *Alpinia galanga* essential oils**  
**Saripah Bakar**, Siti Noor Hajjar Md Latip, Alias Awang and Zhang Aijun
- 96      1540 - 1600      **[AB072] Digital Spectral and Sucrose Profiling of Different Development Stages of Cocoa Clones**  
**Nor Aizam Adnan**, Nur Nadhirah Rusyda Rosnan, Saripah Bakar and Juazer Rizal Abdul Hamid



<b>DAY 2 THURSDAY (DEC 20, 2018)</b>		
<b>SESSION 5B</b>		
Chairperson: Associate Professor Dr. Corina Joseph Venue: Sarawak Chamber 3 (Level 3)		
97	1400 - 1420	<b>[AB044] Entrepreneurial orientation and performance in Sarawak hotel operations</b> Margaret Lucy Gregory, Malvern Abdullah, Leong Siow Hoo and Hiram Ting
98	1420 - 1440	<b>[AB013] Integrating Peace Education in Pre-Service Teachers Training Programs in Pakistan</b> Sufi Amin, N. B. Jumani, Samina Malik and Massod Ahmad
99	1440 - 1500	<b>[AB014] The Effectiveness of Mass Media on Academic Achievement of Students at University level in Pakistan</b> Nazar Muhammad, Sufi Amin and Sakina Jumani
100	1500 - 1520	<b>[AB038] Model of Human Development Saleh Kamil Ad-Din (PISKA) based on the Theory of Change Morals Al-Ghazali In the Islamic Educational Studies at the Polytechnic</b> Mohamad Faisal Ahmad, Mohd Isa Hamzah, Khadijah Abdul Razak and Maria Mohammad
101	1520 - 1540	<b>[AB077] Social Media and its Impact on University Student's Academic Performance</b> Kuldip Singh
102	1540 - 1600	<b>[AB061] Internet Literacy among Secondary School Students in Transition to the Digital Age</b> Lee Hung Liew, Adeline Engkamat, Siti Nursarjana binti Malim and Azlina Narawi
<b>SESSION 5C (AT)</b>		
Chairperson: Dr. Abdul Rahman Bin Sali Venue: Windows on Kuching 1 and 2 (Level 18)		
103	1400 - 1420	<b>[AA007] Effects of Empty Fruit Bunches (EFB) Compost and Mycorrhiza Towards the Growth Performance of Maize (<i>Zea mays</i>)</b> Luzyana Tupang Guyu, Siti Sahmsiah Sahmat, Zubaidah Yusop and Caroline Akoi
104	1420 - 1440	<b>[AT002] Effect of Biochar from Oil Palm Waste on Sweet Corn Yield</b> Nazirin, A.R, Hasmah, M., Sulaiman, M., Muyan, R., Noh, M.F and Rasyid, M.K.
105	1440 - 1500	<b>[AT003] Effect of Amended Soil with Oil Palm Empty Fruit Bunch Compost on the pH of Soil and the Growth of Choy Sam (<i>Brassica chinensis</i> var. <i>parachinensis</i>)</b> Tahashshunan Mujaddid Bin Ariffin and Margaret Chan Kit Yok
106	1500 - 1520	<b>[AT004] Productivity of Asparagus (<i>Asparagus officinalis</i>) to Goat Manure in Amended Soil with Empty Fruit Bunch Compost</b> Nor Shahirah binti Ahad and Margaret Chan Kit Yok
107	1520 - 1540	<b>[AT005] Study on the Improvement of Coastal Marginal Soil after Amendment with EFB Compost on the Growth of Young Oil Palms</b> Solehudin Bin Jeffry, Margaret Chan Kit Yok and Siraj Munir bin Mohammad
108	1540 - 1600	<b>[AT006] Potential of Biochar from Sago Wastes as Soil Amendment on Maize (<i>Zea mays</i>) Yield</b> Dinggun, K.K., Hasmah, M., Sulaiman, M., Samuel, M.M, Bubun, J.J, and Sharon, P.

**DAY 2 THURSDAY (DEC 20, 2018)****SESSION 5D**  
(AS/EN)**Chairperson : Mdm Maureen Neging****Venue: Windows on Kuching 3 and 4 (Level 18)**

- 109 1400 - 1420 **[EN013] Correlation between Compressive Strength and Ultra-sonic Pulse Velocity (UPV) on Local Ready-Mix Concrete Partially Replaced With Local Fly Ash**  
J. Matarul, **M.A. Mannan**, A. Ibrahim, C.F. Ha and E. E. M. Yusuf
- 110 1420 - 1440 **[EN014] Assessment of Soil Gradation and Uniformity at Different Area in Sandakan**  
**Iffah Wahida Jaini**, NurEdriana Sarkawi, Nurul Husna Marzuki, Amir Nazaruddin and Farah Hafice Ahmad
- 111 1440 - 1500 **[EN015] Leapfrogging to Malaysian Engineering Education 4.0: The Changing Skill Requirements in Embracing the Fourth Industrial Revolution**  
**Alfonso Anak Nelson**, Nur Afrina Aina Binti Nornizam, Najwa Ummairah Binti Adris, Ahmad Zaidi Hampden and Ahmad Fadzil Jobli
- 112 1500 - 1520 **[EN016] Civil Engineering Students' Perception on Industrial Training: A Case Study in UiTM Sarawak**  
**Siti Nur Dahlia Omar**, Nurfatin Anisa Alias, Sazhalyana Lantong, Noor Azland Jainudin, Morgan Jampi and Abang Fhaizdhyall
- 113 1520 - 1540 **[EN017] Design of Water Reticulation Pipeline Based on Population Growth Rate Projection for Kampung Lubuk Punggor Simunjan**  
**Jacqueline Michella Anak Nathen**, Jessica Nawi Anak Entemang, Rozifaj binti Kahar, Lannie Francis and Clotilda Petrus
- 114 1540 - 1600 **[AA006] Construction Management in Kuching: Current Issues and Challenges**  
**Fadlin Ahmad Azuwaniza**, Muhammad Amirul Othman, Mohd. Amrol Nur Afiq Abd. Razak, Awang Nasrizal Awang Ali and Beatrice Christianus Bidaun

**SESSION 6A****Chairperson: Dr Isabel Fong Lim****Venue: Deer and Lady Suite (Level 3)**

- 115 1630 - 1650 **[AB020] Perceptions and Challenges of Education 4.0 in Essential Academic English Class**  
**Thuwaibah Mohd Junaid**
- 116 1650 - 1710 **[AB029] The Effectiveness of VB.NET Digital Dictionary Application Among Diploma in Information Technology (Digital Technology) Students in Polytechnic of Muadzam Shah**  
**Noorrohani Binti Ahmad**, Linawati Razak @ Ali and Sharfah Ratibah Binti Tuan Mat
- 117 1710 - 1730 **[AB052] Solid-Phase Microextraction based on an Agarose-Chitosan-Multiwalled Carbon Nanotube Composite Film Combined with Liquid Chromatography for the Determination of Tricyclic Antidepressants in Water Samples**  
**Wan Nazihah Wan Ibrahim**, Mohd Marsin Sanagi, Nor Suhaila Mohamad Hanapi, Nor'ashikin Saim and Siti Kartina Abdul Karim
- 118 1730 - 1750 **[AB056] Online Solid Phase Extraction Liquid Chromatography: Selective Determination of Acidic Drugs in Water Samples by Using Alginate Incorporated Multi-Walled Carbon Nanotubes as Sorbent**  
**Nurzaimah Zaini @ Othman**, Nor Suhaila Mohamad Hanapi, Nor'ashikin Saim, Wan Nazihah Wan Ibrahim and Non Daina Masdar
- 119 1750 - 1810 **[AB053] Effect on the Development and Survival of the Bagworm, *Metisa plana* (Lepidoptera: Psychidae) in different temperature**  
**Cynthia Eja Enting** and Siti Noor Hajjar Md Latip



<b>DAY 2 THURSDAY (DEC 20, 2018)</b>		
<b>SESSION 6B</b>	<b>Chairperson: Dr. Lee Beng Yong</b> <b>Venue: Sarawak Chamber 3 (Level 3)</b>	
120	1630 - 1650	<b>[AB064] Exploring Students' Acceptance in Learning Grammar through Massive Online Open Course</b> Nor Ashikin Mohd Yusof and Norkamruzita Saadon
121	1650 - 1710	<b>[AB067] Week Without Wall: Students' Perceptions in Learning an Engineering Course Through Video Conferencing</b> Norkamruzita Saadon and Nor Ashikin Mohd Yusof
122	1710 - 1730	<b>[AB021] Crack Assessment of Self-compacting Fibre Reinforced Concrete (SCFRC) Ribbed Slab under Concentrated Load</b> Ezatul Yasmin, B., Mohd Hisbany, M.H., Hazrina, A.
123	1730 - 1750	<b>[AB010] Application of Mixed Method Research in Pakistan: Emerging Issues and Challenges</b> Syed Asad Abbas Rizvi, Nabi Bux Jumani and Muhammad Masoud Asdaq
124	1750 - 1810	<b>[AB026] Tyrosinase inhibition and antioxidant activities of Riceberry (<i>Oryza sativa</i> L.)</b> Korawinwich Boonpisuttinant, Sarinporn Udompong and Rattiya Boonbai (posters presentation)
<b>SESSION 6C (AT)</b>	<b>Chairperson: Dr. Abdul Rahman Bin Saili</b> <b>Venue: Windows on Kuching 1 and 2 (Level 18)</b>	
125	1630 - 1650	<b>[AT007] Yield Response of Sweet Corn (<i>Zea mays</i>) on Biochar from Paddy Waste Application</b> Nadia Martin, Hasmah Mohidin, Sulaiman Man, Donica Genut Chupong, Mohd Eizlan Sulaiman and Bangie Ramba
126	1650 - 1710	<b>[AT008] Effect of Slow Release Fertilizer Applications on Leaf Area and Bole Diameter of Oil Palm (<i>Elaeis guineensis</i>) in Coastal Sandy Soil</b> Timothy Achan, Margaret Chan Kit Yok and Siraj Munir bin Mohammad
127	1710 - 1730	<b>[AT009] The Growth and Yield Response of Choy Sam (<i>Brassica chinensis</i> var. <i>parachinensis</i>) to Amended Soil with Empty Fruit Bunch Compost and Fish Meal</b> Nurmaliena Binti Rosli and Margaret Chan Kit Yok
128	1730 - 1750	<b>[AT010] Growth Response of Young Oil Palm to Slow Release Fertilizer (<i>Elaeis guineensis</i>) in Coastal Marginal Soil</b> Nur Hafizah Indara, Margaret Chan Kit Yok and Siraj Munir bin Mohammad
129	1750 - 1810	<b>[AT011] Adaptation in Plantation Sector: A Qualitative Study on Youth Planters</b> Muhd Helmi Azman and Abdul Rahman Saili
130	1810 - 1830	<b>[AT012] Determining Significant Factor Affecting Youth Retention in Plantation Sector</b> Mohd Nur Fikri Bin Waktu Saptu, Ahmad Shahir Abd Aziz, Rumaizah Binti Che Mohd Nor, Mohd Azrul Nizam Bin Latanang

**DAY 2 THURSDAY (DEC 20, 2018)**

**SESSION 6D**  
(EN/AS)

**Chairperson: Mdm.Wong Mui Hung**  
**Venue: Windows on Kuching 3 and 4 (Level 18)**

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| 131 | 1630 - 1650 | <p><b>[EN019] Implementing Open-ended Laboratory Experiment in a Civil Engineering Program</b><br/> <b>Amanda Yusak</b>, Corneliana Lamah Balintian, Carldrick Junatan Jumbun, Siti Zaidah Othman and Rudy Tawie</p> |
| 132 | 1650 - 1710 | <p><b>[AS037] Secondary Metabolites from <i>Calophyllum andersonii</i></b><br/> <b>Atikah binti Rosmin</b> and Vivien Jong Yi Mian</p>   |
| 133 | 1710 - 1730 | <p><b>[AS038] Isolation and Characterization of Chemical Compound of <i>Calophyllum ferrugineum</i></b><br/> <b>Nuratika binti Osman</b> and Vivien Jong Yi Mian</p>   |
| 134 | 1730 - 1750 | <p><b>[AS039] Inhibition Studies of Cellulolytic Activities from <i>Garcinia cuneifolia</i></b><br/> <b>Yolanda Mina Raja</b>, Vivien Jong Yi Mian and Ang Chung Huap</p>  |
| 135 | 1750 - 1810 | <p><b>[AS040] Preliminary Study on Anaerobic Digestion of Fruit Wastes for High Yield of Potential Biogas Production</b><br/> <b>Nadzirah Binti Ainin</b>, Syaliza Binti Abdul Hammid and Rafidah Binti Selaman</p>  |
| 136 | 1810 - 1830 | <p><b>[AS041] Chemical Analysis and Antioxidant Activity of Pineapple Wastes</b><br/> <b>Nursyafiqah Bujang</b>, Syaliza Abdul Hammid and Rafidah Husen</p>  |